



PATENT
Docket No.: 19226/2282 (R-5782)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants :	Swihart et al.)	Examiner:
)	A. Sarkar
Serial No. :	10/796,442)	
)	Art Unit:
Cnfrm. No. :	1817)	2891
)	
Filed :	March 9, 2004)	
)	
For :	PROCESS FOR PREPARING LUMINESCENT SILICON NANOPARTICLES)	
)	

DECLARATION OF MARK T. SWIHART, Ph.D. UNDER 37 C.F.R. § 1.132

I, MARK T. SWIHART, Ph.D., hereby declare:

1. I received a Bachelor of Science degree in Chemical Engineering from Rice University in 1997 and a Ph.D. degree in Chemical Engineering from The University of Minnesota, Twin Cities in 1997.

2. I am currently Associate Professor and Director of Graduate Studies, Department of Chemical and Biological Engineering, The University at Buffalo (SUNY).

3. I am an inventor of the above-identified application, along with coinventors Xuegeng Li and Yuanqing He.

4. I am a coauthor with Xuegeng Li, Yuanqing He, and Sudha Talukdar on the publication entitled "Photothermal Aerosol Synthesis of and Photoluminescence from Silicon Nanoparticles," *Annual Meeting Archive AICHE* 1284–1289 (November 3–8, 2002) ("the Li paper").

5. The Li paper was presented on November 8, 2002. The paper was not publicly available before the meeting. It was submitted to the conference organizers on August 27, 2002. Sometime between August 27 and November 3, 2002, it was added to a conference proceedings CD that became available to the public at the November 8 meeting.

6. The claimed invention of the above-identified application was conceived by me and co-inventors Xuegeng Li and Yuanqing He.

7. Sudha Talukdar was a Ph.D. student in chemical engineering at The University at Buffalo (SUNY) when he made his contribution to the development of a photothermal aerosol process for preparing silicon nanoparticles. Dr. Talukdar did not contribute to the conception of the invention as described and claimed in the above-identified application, but, rather, worked under instructions from me. In particular, Mr. Talukdar was only involved in setting up the reactor system, under my direction, during the initial stages of our research. Dr. Talukdar was no longer working on this project when we produced silicon nanoparticles that were photoluminescent.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Dated: November 28, 2005

Mark T. Swihart, Ph.D.